

Don't take

CHANCES

with

Communicable  
Diseases



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We Can't *Afford* to take chances with . . .

## COMMUNICABLE DISEASES

. . . THEY ARE PREVENTABLE

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### WE DO NOT NEED TO TAKE CHANCES IF WE UNDERSTAND THEM AND THE METHODS OF PREVENTING THEM

They are caused by living germs.

These germs travel from person to person either by

DIRECT ROUTES

or

INDIRECT ROUTES

By "direct" we mean by definite contact between persons, such as by discharges from the mouth and throat as in speaking, coughing, sneezing, kissing, etc.

By "indirect" we mean that the germs are carried by an outside agency. In other words, water, milk, food, dishes or articles of clothing may become contaminated by the discharges of a sick person and may transmit the disease germs to someone else.

Insects and animals, too, may act as carriers of disease germs.

Persons may act as carriers of a disease after they have recovered from it and sometimes even without having been attacked by it. Diphtheria carriers harbor germs in their throats and infect others by direct contact. Typhoid carriers usually harbor germs in their gall bladders, kidneys and bowels and infect others by indirect contact.

### EACH DISEASE IS CAUSED BY ITS OWN SPECIAL GERM

These germs are of different shapes and sizes.

They cause different changes in the body.

Some are more dangerous than others.

Even those of one disease may vary in their poisoning powers.

They all prefer the same temperature—about the same as body temperature.

Some are easily destroyed—others with difficulty.

Extreme cold will destroy some.

Extreme heat, such as boiling or steam pressure, is much more efficient.

Certain chemicals, such as chlorine, will destroy them. Chemicals must be used in proper strengths and for the proper length of time.

Sunlight will destroy them.

Drying will kill some of them.

**When germs gain entrance to the body they do not immediately cause illness.** First they must multiply until there are sufficient numbers or until they have manufactured sufficient poison (toxin) to cause illness. The period of time between first infection and first symptoms is called the **INCUBATION PERIOD**. During this incubation period, before we know the person is infected, the germs may be passed to others and infect them. That is one of the reasons that **communicable diseases may be widely spread before they are even recognized.**

We all know that disease germs do not **successfully** attack everyone. Whether a person becomes ill or not when attacked by disease depends upon:

the degree of exposure;  
susceptibility;  
immunity.

The degree of illness depends upon:

the poisoning powers (or virulence) of the germs.

**Exposure** takes place when a person comes in contact with germs either by direct or indirect contact. It may be slight or great, depending on the number of germs and their virulence.

**Susceptibility** is the lack of resistance to germs or their toxins, and is the very opposite of immunity. Some people take every disease to which they are exposed—and they are said to be highly susceptible to disease.

**Immunity** is the power of resistance to germs. It may be natural or acquired and, if acquired, may be either active or passive.

**Natural Immunity** is that with which we are born. It may pass off early in life or last for some time.

**Acquired Immunity** is that gained during life.

**Passive** immunity is acquired by injections of antitoxin or convalescent serum, and is usually of short duration.

**Active** immunity is acquired by an attack of disease or by the use of vaccines, toxoids, or small doses of toxin, such as vaccine against smallpox, toxoid against diphtheria, toxin against scarlet fever and typhoid vaccine against typhoid fever. These materials stimulate the formation of substances known as antibodies, which fight and destroy the germs or at least render them harmless to the person so protected.

## COMMUNICABLE DISEASES MAY BE PREVENTED BY:

**Quarantine and Isolation**, which are the oldest methods known and which are still used. When a house is quarantined, no one is permitted to enter or leave. No letters, books, food or food containers may be removed from the premises without permission of the Health Officer.

This limitation of freedom is continued until the patient is no longer passing on germs which may infect others.

**Isolation** means that the patient and nurse remain in a part of the house removed from other members of the family. No articles may be taken out of the room until they have been sterilized. **It is really quarantine in a room or suite of rooms.**

**Personal Hygiene.**—Cleanliness of the body, including washing the hands before eating, preparing or handling food, and after being to the toilet; covering the nose and mouth before coughing or sneezing; avoidance of kissing, all help to prevent the spread of infection.

**Sanitation.**—The proper disposal of body discharges, garbage, manure and wastes, the control of flies, vermin and rodents all enter into the picture of disease prevention.

**Safe Water Supply.**—Water must be protected from contamination, and if there is any suspicion that it is unfit for use it must be **BOILED OR CHLORINATED**.

**Pure Food.**—Food must also be protected from contamination and if there is any possibility of contamination it must be **COOKED OR BOILED** before it is eaten.

# MOST IMPORTANT OF ALL IN THE PREVENTION OF COMMUNICABLE DISEASE IS IMMUNIZATION

the process by which we may be made immune to certain specific diseases

## WE HAVE ...

**Vaccination against Smallpox.** It should be done early in infancy and repeated every seven years. It is almost 100% protection and the modern method leaves only a small scar.

**Toxoid against Diphtheria.** It should be given at the age of nine months. It is administered hypodermically in three small doses three weeks apart. At school age, a Schick test may be done to see if the child is still protected, and if not, further doses of toxoid are necessary. A very large percentage are protected.

**Toxin against Scarlet Fever.** It may be given at nine months in five or six doses one week apart. A Dick test tells us if the child has been protected.

**Vaccination against Typhoid Fever.** It should be given to all those in areas where typhoid is prevalent and to those travelling or camping in areas where the sanitation and water supply are not properly controlled. It is given in three small doses one week apart.

**Vaccination against Whooping Cough.** Many doctors are finding whooping cough vaccine is a help in protection against this disease. Even in the cases where it does not entirely protect against an attack, it is thought that it at least renders it less severe. It is best given at the age of six months or even a little younger. There are three doses given three weeks apart. An augmenting dose should be given one year later and again one-and-a-half years after the first augmenting dose.

All persons who are suspected to be suffering from any communicable disease should be isolated at home until a definite diagnosis can be made, and then treated according to the Public Health Regulations. No person should be knowingly exposed to any communicable disease. **Although the disease may be mild the complications may be severe.**

**DO YOUR PART TO PREVENT COMMUNICABLE DISEASE.**

## COMMUNICABLE DISEASES Regulations for their Control and Prevention

DISEASE WITH INCUBATION PERIOD	EARLY SIGNS AND SYMPTOMS	SOURCE OF INFECTION	EXCLUSION FROM SCHOOL
<b>CHICKEN POX</b> 2 - 3 weeks	Usually very mild fever. On second day scattered pimples, first on body, these fill with clear fluid; the blisters dry up and form crusts in three or four days.	Secretions from nose and throat. Probably fresh undried material from the blisters.	Until all scabs have disappeared from the skin and the skin is smooth. Particular attention must be paid to the scalp.
<b>COMMON COLD</b> A few hours.	Watery discharge from eyes and nose, sneezing, headache, slight fever, loss of appetite.	Discharges from nose and throat.	Until all discharge has ceased.

## COMMUNICABLE DISEASES (Continued)

DISEASE WITH INCUBATION PERIOD	EARLY SIGNS AND SYMPTOMS	SOURCE OF INFECTION	EXCLUSION FROM SCHOOL
<b>DIPHTHERIA</b> 2 - 5 days	Onset either rapid or gradual, usually with signs of fatigue and prostration; sore throat with swelling of the neck; white patches may be seen on the tonsils; often noisy breathing and hoarseness. In nasal cases, discharge from the nose with sores around the nostrils. First signs of laryngeal diphtheria may be difficulty of breathing. (Rarely, there is diphtheritic infection of wounds, or of the vulva, or of the conjunctiva).	Discharges from nose and throat; soiled linen or other articles; contaminated milk (or from infected wounds, vulva or conjunctiva).	Until 2 cultures from the nose and 2 from the throat (taken not less than 24 hours apart) fail to show the presence of diphtheria bacilli.
<b>GONORRHOEA</b> 1 - 8 days	Purulent discharge from genitals or from eyes.	Usually sexual contact; rarely discharges on bed linen or towels.	Until certified by health officer or medical attendant.
<b>INFANTILE PARALYSIS</b> (Poliomyelitis) 4 - 14 days (usually 6)	Onset usually mild; slight fever; stiff neck; disinclination to sit up; headache; frequently vomiting; sometimes sudden weakness or tenderness of one or more limbs. Early recognition essential for satisfactory treatment; suspicious cases are to be referred to the doctor at once. Do not wait for paralysis.	Discharges or secretions from nose, throat and bowel of patient, and often of apparently healthy persons.	Until the patient has recovered from the acute illness or longer, at the discretion of the Medical Officer of Health of the Municipality in which the patient is resident.
<b>INFLUENZA</b> 1 - 3 days	Fever; headache; cough; prostration; feeling of tiredness.	Discharges from nose and throat, especially in the earliest stages.	For at least 7 days from onset of disease.
<b>MEASLES</b> 7 - 14 days (usually 10 - 12)	Cold in head with feverishness; sore eyes, sneezing and coughing. Frequently child cannot bear the light. Rash appears third day; dull red spots, which soon become raised. These may first be seen behind the ears, then on forehead, face and over the body. The rash develops rapidly if patient is in a warm room.	Discharges from nose and throat.	Until all discharges from nose and throat have ceased. Not less than 10 days after appearance of rash.
<b>MENINGITIS</b> (Cerebrospinal or Meningococcal) 2 - 10 days	Headache; stiffness of neck; later retraction; slight fever; vomiting.	Discharges from nose and throat.	Until clinical recovery.
<b>MUMPS</b> 12 - 26 days	Painful swellings at the angle of the jaw, in front of and below the ear; opening of mouth often painful.	Discharges from nose and throat.	Until all swelling has subsided.
<b>PNEUMONIA</b> 2 - 3 days	Fever; rapid breathing and often vomiting; pain in side of chest or in abdomen. Older children often have sudden onset with rigor or severe chill and high temperature.	Discharges from nose and throat of patient, and often of apparently healthy persons.	Until cured to the satisfaction of medical attendant.
<b>SCARLET FEVER</b> or Scarlatina. 2 - 7 days (usually 3 - 4 days)	Sudden onset; vomiting; sore throat, fever; maybe convulsions. After 24 hours rash on chest, spreading downwards (resembling a scald, with diffuse bright spots); face flushed, but parts around mouth pale; tongue whitish with red spots, like a strawberry.	Discharges from nose and throat, ears and sometimes from sores. Infection often carried in milk.	Until all discharges have ceased. At least 28 days after onset, or longer if health officer so orders.



## COMMUNICABLE DISEASES (Concluded)

DISEASE WITH INCUBATION PERIOD	EARLY SIGNS AND SYMPTOMS	SOURCE OF INFECTION	EXCLUSION FROM SCHOOL
<b>SEPTIC SORE THROAT</b> 1 - 3 days	Sore throat; cough and weakness; throat diffusely reddened and inflamed; often patches not unlike those seen in diphtheria.	Discharges from nose and throat. Often milk from infected udders.	Until throat has cleared. At least 8 days after onset.
<b>SMALLPOX</b> 8 - 16 days (usually 12)	Onset usually sudden; backache; headache; rash appears on or about the third day, and is first seen on face and wrists; mouth and throat are frequently full of sores. The rash consists of small red spots which become elevated and hard, like shot felt in the skin; in a few days these become blisters filled with clear fluid which later becomes turbid pus; in time these form scabs, which fall off about the 14th day. Light cases are often mistaken for chicken pox, a disease which seldom occurs in adults. Smallpox within five years of vaccination is almost unknown, within fifteen years very rare.	Discharges from nose and mouth; blisters and pustules; also probably scabs; soiled linen and towels. Infection may be carried by flies.	5 days after all crusts have fallen from skin. Minimum 21 days.
<b>SYPHILIS</b> 10 days-2 months (usually 3 weeks)	Genital sore or sores. Skin rashes. All signs and symptoms may be absent— $\frac{1}{2}$ of cases. Other signs and symptoms are variable.	Sexual contact. Congenital syphilis in newborn. Occasionally from kissing, contaminated towels or linen.	Until certified by health officer or medical attendant.
<b>TRACHOMA</b>	Inflammation of eyes with discharge, granular incrustations on lids. Blindness often results.	Discharges from eyes.	Until declared non-infectious by health officer or medical attendant.
<b>TUBERCULOSIS</b>	Development gradual; loss of appetite, weight and energy; later persistent cough, fever, rapid pulse and pain in chest; enlargement of glands of neck, or inflammation, pains in bones and joints, often with swelling and redness.	Any discharges from the body, mainly the sputum or droplets from the mouth; sometimes from open sores.	Until improvement of health and sputum is free of germs, under advice of medical attendant.
<b>TYPHOID FEVER</b> 3 - 23 days (usually 10 - 14)	Onset gradual with heaviness and dullness; headache; often cough and signs of bronchitis or pneumonia. After a few days, fever and diarrhoea. Sometimes onset is apparently sudden, with bleeding from the bowel.	Bowel discharges and urine of infected individuals; sometimes for long after recovery; through polluted water, contaminated hands, linen or flies, sometimes in milk or shellfish.	Until 2 negative stool and urine cultures one week apart have been obtained.
<b>WHOOPIING COUGH</b> 7 - 10 days (rarely, up to 14 days)	Hacking irritable cough, often signs of cold in the head; maybe sore throat. After 7 to 14 days, development of "whoop"; long drawn out crowing inhalation following paroxysm of short coughs, often ending in vomiting.	Discharges from nose and throat.	Until 5 weeks after commencement of the disease.

## For the Protection of yourself and others . . .

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1. Be immunized yourself, and encourage others to be immunized.
  2. Wash your hands before preparing, handling or eating food.
  3. Keep food in proper containers, and have doors and windows screened so that flies will not be able to contaminate the food.
  4. Dispose of garbage and human body wastes in a safe and sanitary manner.
  5. When you have a cold or any other communicable disease stay at home. You will recover faster and at the same time not expose others to your infection.
  6. Cover your mouth and nose when coughing or sneezing.
  7. Destroy all discharges from the nose and throat.
  8. Avoid kissing persons, especially children, on the mouth.
  9. Do not use common drinking cups and eating utensils until they have been thoroughly cleansed.
  10. Do not drink water that has not been chlorinated or boiled, unless you know that it is safe.
  11. Do not allow anything that is not clean and free from infection to enter the nose or mouth.
  12. Do not use another person's toilet articles.
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. . . Help Prevent Communicable Disease